

TWO NEW SPECIES OF ECTOPARASITIC MITES FROM POUCHED MICE, *SMINTHOPSIS* FROM AUSTRALIA

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Fig. 1-2.

FAMILY LAELAPTIDAE Berlese 1892.

LAELAPS (*LAELAPS*) *SMINTHOPSIS* sp. n.

Fig. 1 A-D.

Description Female. Shape broadly oval. Dark brown and strongly chitinized. Length of idiosoma $1,300\mu$, width 845μ . Dorsal shield not entirely covering dorsum; as figured 880μ long by 500μ wide with numerous long slender setae to 120μ long; some of the anterior marginal setae on shield and anteriorly on the surrounding cuticle are rather shorter, stumpier and strongly shortly ciliated. Venter: tritosternum with base in front of margin of sternal shield; no pre-endopodal or jugular shields; sternal shield wider than long, with 3 pairs of setae and 2 pairs of pores, the anterior setae are short and ciliated, the others long and nude, surface reticulate; metasternal shields distinct with long slender seta and pore; genito-ventral shield small, flask-like but not conspicuously expanded behind coxae IV, with fimbriated anterior and 4 pairs of setae; metapodal shields small and round; cuticle behind coxae IV with numerous setae, lengthening posteriorly where they are more ciliated; anal shield rounded with usual 3 setae; setae on gnathosoma ciliated. Legs: rather short, II the thicker, I 780μ long, II 650μ , III 690μ , IV 975μ ; coxae I with a very stout blunt smooth spur, a smaller one on II, the other setae on coxae ciliated and rather stumpy; legs with ciliated setae. Chelicerae small as figured, each finger with 2 subapical teeth and fixed finger with simple seta (*pilus dentarius*), pulvillum with spine-like teeth.

Male. Unknown.

Loc. and Host. The holotype female and 5 paratypes from *Sminthopsis leucopus* Gray, from Gorae, Victoria, 1937 (coll. H. H. Finlayson).

Remarks. In size this species is closely related to the genera *Macrolaelaps* Ewing 1929 and *Gigantolaelaps* Fonseca 1937. From the latter it differs

in having the normal 4 pairs of genito-ventral setae and the straight not medially produced anterior sternal margin. In *Macrolaelaps* the genito-ventral shield is much expanded behind coxae IV and almost reaches the anal shield.

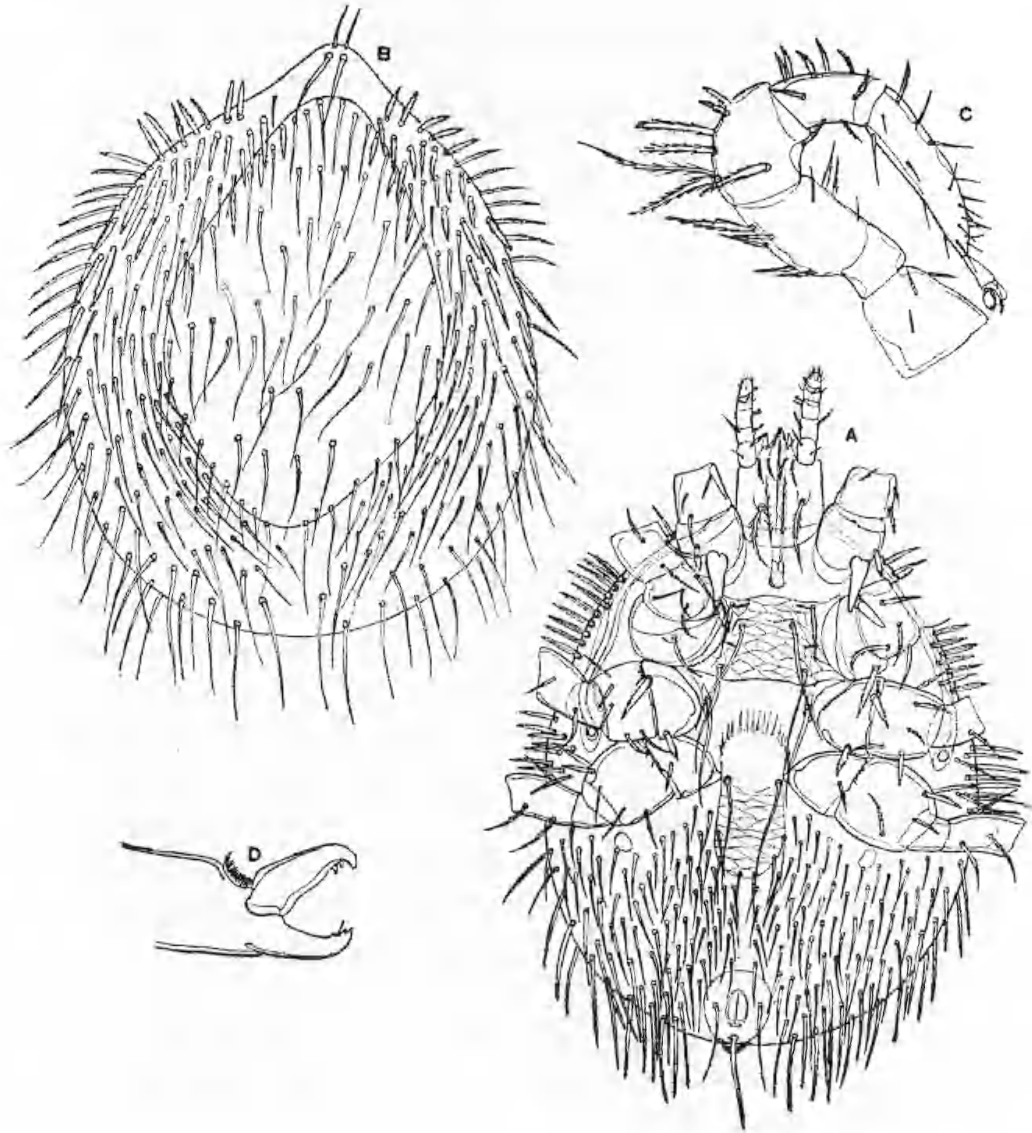


Fig. 1. *Laelaps sminthopsis* sp. n. Female: A venter, B dorsum, C leg II, D chelicerae.

FAMILY LISTROPHORIDAE Canestrini 1892.

AUSTROCHIRUS SMINTHOPSIS sp. n.

Fig. 2, A-E.

Description. Form elongate, with dorsal and ventral semicircular scaling, not much compressed, but provided particularly on coxae II with a raised carina

for grasping hair, and the body posteriorly on coxae IV in life tending to incurve ventrally for the same purpose; legs I and II also slightly modified for grasping hair. Coxae in two comparatively narrowly separated groups. Dorsal shield trilobed. All tarsi with suckers. Legs IV of male stouter than in female, and in that sex with two pairs of anal suckers.

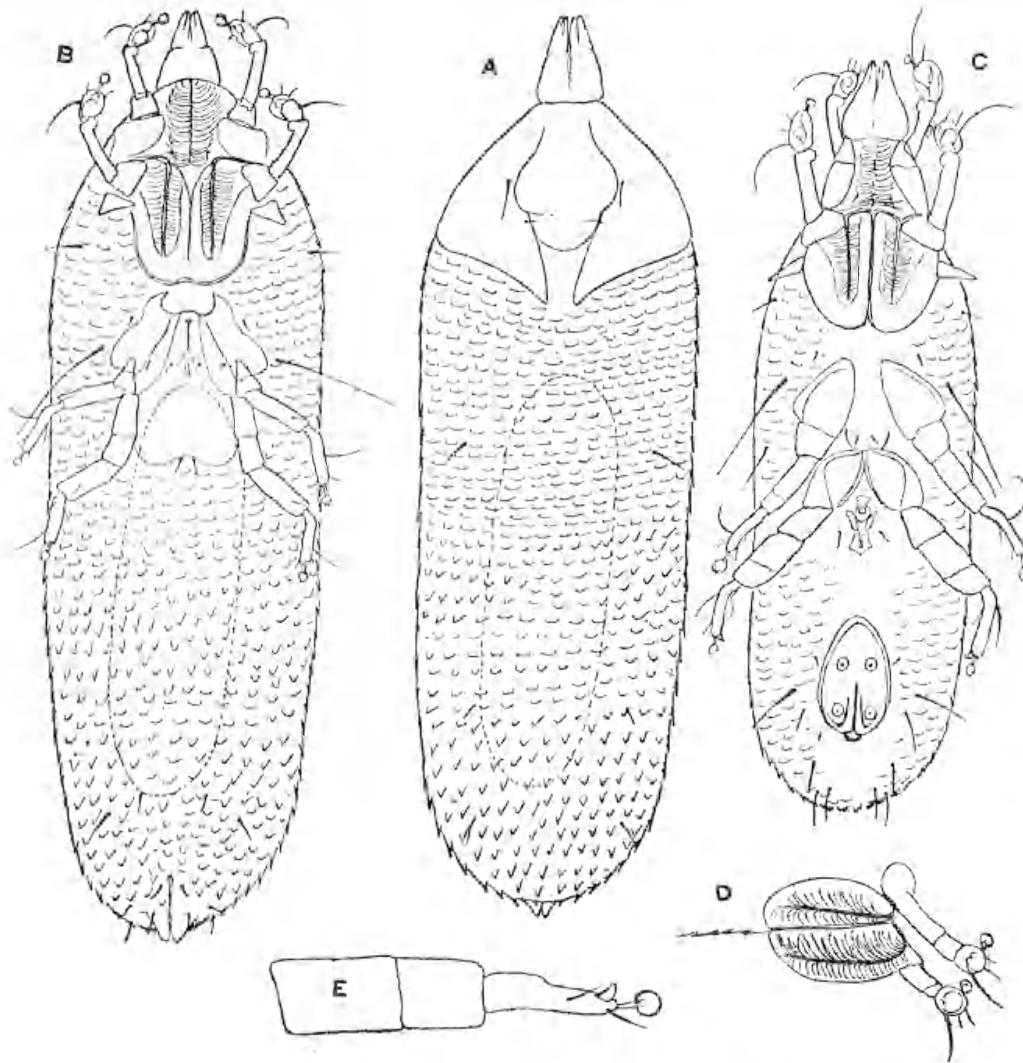


Fig. 2. *Austrochirus sminthopsis* sp. n. A, female dorsal view; B, same, ventral view; C, male, ventral view; D, coxae II and legs I and II in semilateral aspect to show raised carina; E, genu, tibia and tarsus of leg IV.

Female. Length of idiosoma to 377μ , width to 104μ . The dorsal shield about one-fifth of body length, divided into 3 lobes, the median of which is short and rounded, the laterals with the posterior margins curving inwards and bluntly pointed on inner angle; furnished with two pairs of setae, the anterior pair about 3 times as long as posterior; dorsum with 3 pairs of short setae.

Ventrally coxae I and II touching in the midline, that of II is enlarged with a strongly raised longitudinal ridge-like lamina, for grasping hair; posterior of coxae II on each side is a smaller triangular apparently movable sclerotized plate which may also assist in grasping hair, both coxae I and II apparently without setae; coxae III and IV also touching in median line, IV the larger, with setae as figured; the genital opening anteriorly between coxae III; on the cuticle between coxae II and III two pairs of long setae, the posterior lateral of coxae III the longest; on the posterior fifth of the venter are 4 pairs of short setae with 2 other pairs flanking the anal opening.

Male. Length of idiosoma 325μ , width 104μ , as in the female dorsally. Ventrally with the genital opening between coxae IV, the anal opening surrounded with an elliptical ring inside of which are two pairs of sucking discs. Leg IV with the trochanter femur and tibia much stouter than in female; apex of tarsi IV furnished with a strong subapical claw.

Loc. and Host. Numerous specimens from a specimen of *Sminthopsis crassicaudata*, the flat-tailed or yellow-footed pouched mouse from the Ninety-mile Desert, west of Tintinara, south-east of South Australia, September 27th, 1953 (coll. W. G. Heaslip).

Remarks. This species is placed in the genus *Austrochirus* Womersley, 1943, although in some respects, the more cylindrical form, the peculiar coxae II with the small accessory shield for grasping hair, the less modified legs I and II, the trilobed dorsal shield, and the strongly scaled cuticle, it does not quite conform to the genus as typified by *Austrochirus queenslandicus* Womersley 1943. Holotype ♀ and allotype ♂ and paratypes in the South Australian Museum collection.